

a spatulate locking pad in the outer end portion of each lead and having a locking pad width which exceeds the lead width;

a spatulate wire bonding pad in the inner end portion of each lead and having a bonding pad width which exceeds the lead width; and,

a die pad attached to the lead frame in the central region thereof and adjacent to the inner end portions of the leads, the die pad having an upper surface and a lower surface, the lower surface having a central portion and a recessed shoulder extending around the central portion.

15. (Amended) The semiconductor package of claim 13, wherein the middle portion of each of the leads is about 0.18 mm wide, and wherein the leads have a pitch of about 0.5 mm.

21. (Amended) A lead frame for a semiconductor package, comprising:

a plurality of elongate metal leads arrayed around a central region, each lead having an outer end portion extending away from the central region, an inner end portion extending toward the central region, and a middle portion extending between the outer and inner end portions, the middle portion being of a lead width and having a lower surface which defines a land;

a spatulate pad formed into each of the inner and outer end portions of each lead, each of the spatulate pads of each lead having a pad width which exceeds the lead width; and,

a die pad attached to the lead frame in the central region thereof and adjacent to the inner end portions of the leads,

the die pad having an upper surface and a lower surface, the lower surface having a central portion and a recessed shoulder extending around the central portion and adjacent the inner end portions of the leads, the die pad having a recessed

shoulder extending around a periphery of a lower surface thereof.

23. (Amended) A semiconductor package of a type that includes a ductile metal lead frame having a plurality of elongate leads radiating out from a central die pad, a semiconductor die mounted on the pad, a plurality of wire bonds connecting the die to the leads, and a protective plastic body molded over the leads, the pad, the die, and the wire bonds, the improvement in combination therewith comprising:

a spatulate wire bonding pad formed into an inner end portion of each lead and adjacent to the die pad, the wire bonding pad having a bonding pad width; and,

a spatulate locking pad formed into an outer end portion of each lead and having a locking pad width:

the bonding pad width and the locking pad width each exceeding a lead width of a middle portion of each lead extending between the inner and outer end portions thereof.

25. (Amended) The semiconductor package of claim 23, wherein the middle portion of each lead has a lower surface defining a land which extends between the spatulate wire bonding and locking pads thereof, each land having a lower surface exposed through a lower surface of the plastic body.

28. (Twice Amended) A semiconductor package of a type that includes a ductile metal lead frame having a plurality of elongate leads radiating out from a central die pad, a semiconductor die mounted on the pad, a plurality of wire bonds connecting the die to the leads, and a protective plastic body molded over the leads, the pad, the die, and the wire bonds, the improvement in combination

a spatulate locking pad formed into an outer end portion of each lead and having a

locking pad width which exceeds a lead width of a middle portion of each lead .

30. (Amended) The semiconductor package of Claim 28, further comprising:

means formed into an inner end portion of each lead and adjacent to the die pad for increasing the wire bonding area on the lead.

31. (Amended) The semiconductor package of Claim 30, wherein the means for increasing the wire bonding area comprises a spatulate wire bonding pad formed into the inner end portion of the lead and having a bonding pad width exceeding the lead width.

37. (Amended) A semiconductor package of a type that includes a metal lead frame having a plurality of elongate leads radiating out from a central region thereof, the lead having inner end portions adjacent to the central region , outer end portions distal therefrom, middle portions extending between the inner and outer end portions, a semiconductor die mounted in the central region, and a protective plastic body molded over the leads and the die, the improvement in combination therewith comprising at least one spatulate pad formed in at least one of the leads and having a pad width which exceeds a lead width of each of the middle portions of the leads , the at least one spatulate pad being underfilled by the plastic body.

38. (Amended) The semiconductor package of Claim 37, wherein the at least one spatulate pad is formed in the outer end portion of the at least one lead.

40. (Amended) The semiconductor package of Claim 37, wherein the at least one spatulate pad is formed in the inner end portion of the at least one lead.